# A Review Of Ponseti Method In Management Of Congenital Talipes Equinovarus In Hospital Kuala Krai

<sup>1</sup>**AB Rahman RA**, <sup>1</sup>Muhd Ruzaimi AR, <sup>1</sup>Zairuddin AZ, <sup>1</sup>Surianty S <sup>1</sup>Orthopaedic, Hospital Kuala Krai, 18000 Kuala Krai, Kelantan, Malaysia

## INTRODUCTION:

Ponseti method is used worldwide for the treatment of congenital talipes equinovarus (CTEV). It involves serial casting followed by Achilles tendon tenotomy and foot abduction bracing. This review provides overview of Ponseti method in managing CTEV (clubfoot) in Hospital Kuala Krai.

## **METHODS:**

From June 2015 to June 2017, a total of 14 patients with 19 clubfeet (5 cases of bilateral (35.71%)) had been treated using Ponseti method. Age of first casting ranging from 1-39 weeks (mean 7.58 weeks). Serial casting were done at weekly interval using plaster of Paris cast. All of them underwent Achilles tendon tenotomy after correction of midfoot cavus, forefoot adductus, and hindfoot varus was achieved. The follow up range was 3-26 months. Neglected CTEV cases were excluded from this review.

### **RESULTS:**

Number of casting done until decision for Achilles tendon tenotomy was 5-13 casts (mean 6.63), with duration of 5-35 weeks (mean 9.68). 1 clubfoot (5.26%) had relapse of ankle equinus at 10 month follow up. It was corrected by recasting and lengthening of Achilles tendon.

Table 1: Summary of reviewed data (n = 19)

Component	Quantity/	Rate/
_	Range	Mean
Bilateral CTEV	5	35.71%
Age of first	1–39	7.58
casting (weeks)		
Number of	5-13	6.63
casting		
Duration of		
casting (weeks)	5-35	9.68
Relapse	1	5.26%

### **DISCUSSIONS:**

The number of casting and the duration are comparable with worldwide literature reviews [1-3]. There is one case that took 35 weeks of casting due to few defaulted appointments in between, related to socioeconomic and logistic problem. The one relapse clubfoot is not associated with age of first casting or non-compliance to braces. All of the corrected clubfeet should be maintained by abduction braces to prevent relapse or recurrence.

## **CONCLUSION:**

Ponseti method is an effective way in treating CTEV, demanding a reasonable number of casting and time.

## **REFERENCES:**

- 1. Ganesan B et.al. PLoS ONE 2017; 12(6): e0178299.
- 2. Sætersdal C et.al. Acta orthopaedica. 2012;83(3):288–93.
- 3. Sanghvi A et.al. Journal of Orthopaedic Surgery. 2009;17(1):67–71.